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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/869,109	06/04/97	CHESSER	B154-9245

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IM31/0430

EXAMINER
KELLY, C

ART UNIT	PAPER NUMBER
1721	15

DATE MAILED: 04/30/99

**Please find below and/or attached an Office communication concerning this application or  
proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**08/869,109**

Applicant(s)  
**Chesser et al.**

Examiner  
**Kelly, C.H.**

Group Art Unit  
**1721**



☒ Responsive to communication(s) filed on Mar 24, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-3, 7, 9, 14-16, 21-23, 27, and 29-65 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-3, 7, 9, 14-16, 21-23, 27, and 29-65 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 7, 9, 14-16, 21-23, 27, 29-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over DD 240559 in view of Mondshine, U.S. pat. No. 4,175,042 in view of House et al., U.S. pat. No. 4427556.

The DD reference discloses adding a starch to a brine solution of NaCl and further adding MgCl<sub>2</sub> to the solution. The reference does not refer to the solutions as precursor and final. However, the starch is added to a brine and the final brine, by addition of Mg salt, is subsequently formed. The DD reference does not mention that the rheology would be increased. The reference does say that the composition prevents fluid loss. The DD reference does not speak specifically to calcium chloride and calcium bromide as the brine components. However, the well known components of calcium chloride and calcium bromide are used in brines and said to form dispersions of high densities as shown by House, columns 5, 8 and 9. House teaches calcium bromide/zinc bromide with particles for dispersions with subsequent addition of calcium carbonate, resulting in a final brine. It would be well within the skill of the ordinary artisan to make the polymer dispersion using calcium chloride and calcium bromide because both are known as components in brines as well in slurries to which starch has been added and used in well drilling operations. The use of starches in brines is known to increase viscosity and rheology as shown by

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House. See column 2 and claims 15-18. House discloses starches added to heavy brines of calcium bromide and calcium chloride having a positive effect on rheology. The hydration does not occur until the after the  $\text{CaCO}_3$  is added. See column 14 in the example. House also teaches Mondshine teaches the use of starch in brines as a fluid loss control agent in columns 6 and 7. Mondshine teaches adding the starch to a suspension of brine particles. Mondshine includes calcium chloride and calcium bromide as the particular brines. It would have been obvious to make a polymer dispersion of calcium bromide and chloride brines containing starch as fluid loss control agents because the combined references teach the method of forming a polymer dispersion in brines and the specific brines (calcium chloride and calcium bromide) for use as fluid loss control agents and rheology increasers.

Applicant's arguments filed March 24, 1999 have been fully considered but they are not persuasive.

Applicant argues that the problem of how to hydrate a water soluble polymer are not solved by the references cited by the examiner. Applicant's claims are not directed to the problem of how to hydrate a polymer. The instant claims are directed to a method of making a polymer precursor dispersion. The references cited are directed to making a polymer dispersion.

Applicant argues that the examiner has not created a case of prima facie obviousness because the examiner has not shown that the references can achieve the same level of

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prehydration as the instant invention. Applicant claims no definite level of prehydration.

Applicant merely recites "a final level".

Applicant argues that the multivalent salts of the instant invention offer advantages over the monovalent salts. Mondshine offers the multivalent salts, which is why Mondshine was included in the rejection. Applicant argues that Mondshine does not fill the gap left by DD because Mondshine mentions other salts and teaches others as preferred. Mondshine, however, does present all as equivalents. Additionally, Mondshine only prefers the sodium and potassium salts because of costs. Nowhere in Mondshine does it state that the others contain some type of character flaw and that they cannot perform the intended purpose. Applicant also quotes the cost and availability are the reasons for the preferred. With that reason for preference stated, that would only lead one of ordinary skill to believe that any of the other salts work as well and would be expected to offer the same features which resulted when making using the sodium or potassium. Applicant then points to a Federal Circuit decision to buttress her argument. This case is irrelevant to the instant argument.

Mondshine's preferred salts are preferred because they cost less, not for any other reason. Mondshine claims that the other (multivalent) salt can be used in the invention. The salts are certainly expected to work.

Applicant further argues that House also cannot fill the gap left by DD and Mondshine. Applicant argues that House adds a solid  $\text{CaCO}_3$  which cannot represent an aqueous second

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solution. When the  $\text{CaCO}_3$  is added, it will produce another salt, which would be expected to have the same effect.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kelly whose telephone number is (703) 308-0499. The examiner can normally be reached on Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharon Gibson, can be reached on (703) 308-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

*C.H. Kelly*

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*GA Kelly*